In the Specification

Amendments to the Specification:

Please substitute the following Replacement Abstract for the Abstract

as filed:

A method of forming a double-gated transistor having a rounded

active region to improve GOI and leakage current control comprises the following

steps, inter alia. An SOI substrate is patterned and a rounded oxide layer is formed over

the exposed side walls of a patterned upper SOI silicon layer. A dummy layer, having

an opening defining a gate, is formed over the exposed patterned top oxide layer and

the exposed portions of the upper SOI silicon layer. An undercut is formed into the

undercut lower SOI oxide layer and the exposed gate area portion of the oxide layer is

removed. The portion of the rounded oxide layer within the gate area is removed and a

conformal oxide layer is formed over a part of the structure. A gate is formed within the

second patterned dummy layer opening and the patterned dummy layer is removed to

form the double gated transistor.

3